

The  
**TRUSCON**  
SOLID STEEL  
**Double-Hung Window**  
(COUNTER WEIGHTED)

for  
OFFICE BUILDINGS  
HOTELS & INSTITUTIONS  
& HIGH CLASS STRUCTURES

**TRUSCON STEEL COMPANY**  
YOUNGSTOWN, OHIO

*Warehouses and Offices from Pacific to Atlantic*

**TRUSCON**  
SOLID STEEL  
DOUBLE-HUNG WINDOW  
COUNTER WEIGHTED





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TRUSCON STEEL COMPANY  
YOUNGSTOWN, OHIO

**TRUSCON**  
SOLID STEEL  
DOUBLE-HUNG WINDOW  
COUNTER-WEIGHTED

1090-62234 TRF



# The TRUSCON

## SOLID STEEL

# Double-Hung Window

(COUNTER WEIGHTED)

*A substantial, close-fitting window of good workmanship and neat joints*

IN general appearance the Truscon Solid Steel Double-Hung Window resembles its wood prototype. The sole divergence occurs where steel design has made it possible to improve upon the lines of the wood window. The functional elements remain the same except for the fact that they are appropriate to the materials used and therefore differ frequently from the wood window in detail, size and shape.

MANY practical advantages have resulted from the change from wood to steel design. The various members of the steel window do not shrink or warp. This permits tighter joints and greater strength. It also permits more secure weathering, a feature of the greatest importance, especially in the eyes of heating and maintenance engineers.

The construction of the window throughout is distinctly superior. The steel used, especially on the exposed portions, is very heavy gauge, experience having shown that light weight metal is in every sense a detriment to the efficiency of the unit.

#### **Copper Bearing Steel Throughout**

The Double-Hung Window, made of copper bearing steel throughout, has superior anti-corrosive and fire-resisting qualities. The use of hot rolled sections in the sash provides extraordinary strength.

Care has also been used in the design to prevent corrosion from water and moisture. The weight boxes have no

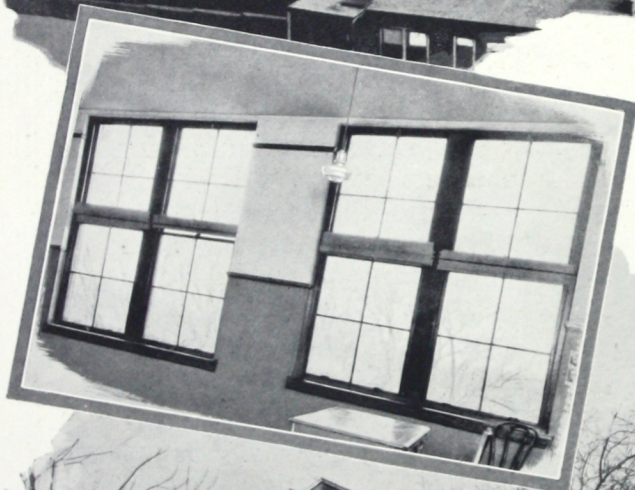
openings to the air, the slots or guides for the sliding elements of the sash being entirely independent of the other elements of the unit. Provision has also been made for the draining of condensation through a small hole at the base of these slots.

Access to the weights and pulleys has been carefully considered in designing the Truscon Solid Steel Double-Hung Window. A covered opening in the weight box just back of the slides makes any necessary adjustment simple and convenient. Pulleys and sash chains are hidden from view.

A further advantage of this Truscon product is the puncture-proof quality of the frame at the caulking points. Two thicknesses of steel remove all danger of punctures by the caulking hammer.

The Truscon Double-Hung Window is shipped completely assembled; weights and hardware are attached in the field. Perfect alignment on the job is assured before the window leaves the factory, where each one is trued to line and welded.

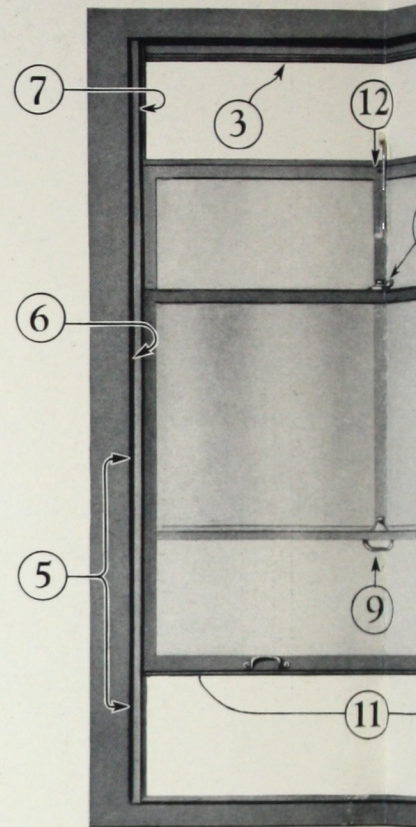




## CONSTRUCTION FEATURES

1. Concealed roller bearing pulley.
2. Concealed chains.
3. Weathertight meeting rail, sash guides, head, and sill.
4. Frame welded at corners—rigid and solid, no bolts, and weathertight.
5. Weights accessible through opening provided with weathertight cover.
6. All exposed metal 12 gauge or heavier.
7. Weathertight frame.
8. Sash made up with heavy hot rolled sections, therefore strong and durable.
9. Handle (or two if desired) for lowering upper sash.
10. A complete sweep lock.
11. Two lifting handles.
12. Window pole socket.

*Hardware is made of sherardized malleable iron. Solid brass or bronze lock and lifting handles supplied on application.*



## A Double-Hung of Superior Quality

**I**N the same measure that steel building construction, the Truscon is proving indispensable for building.

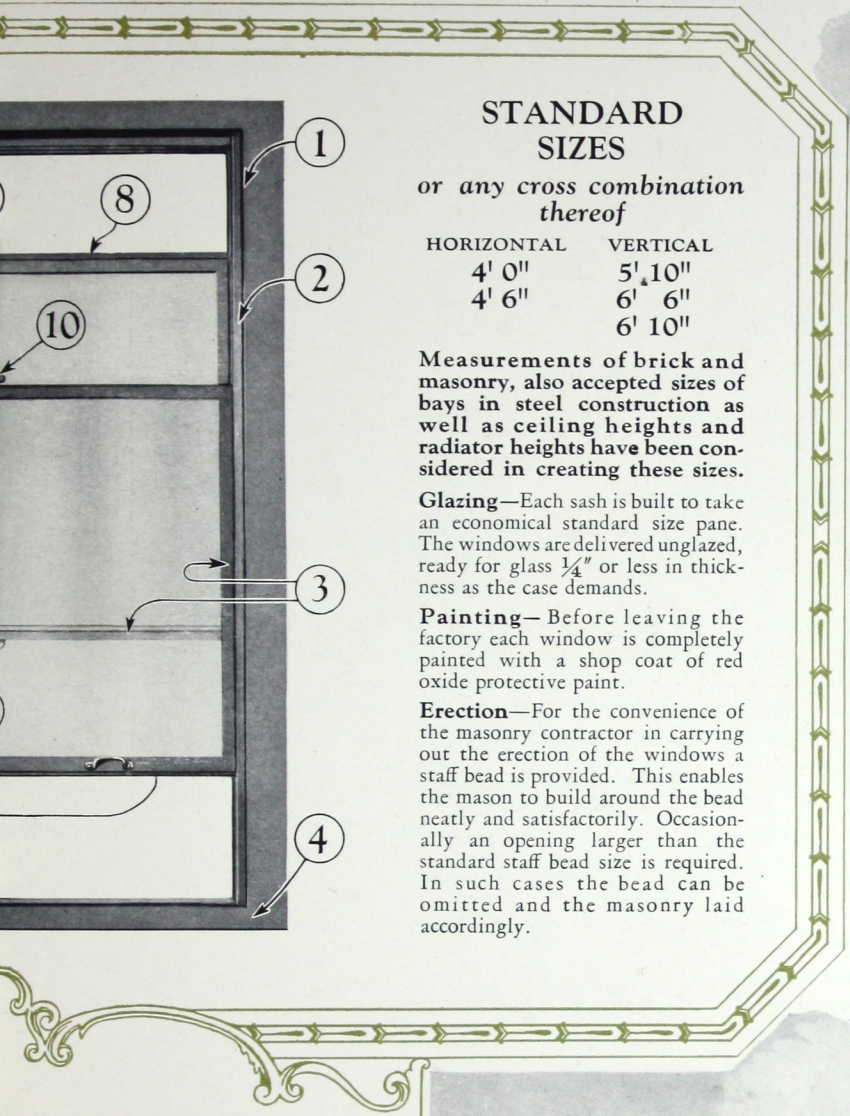
In office buildings, hotels, high-class structures—wherever with durability, strength, practicality, the Truscon product offers to the architect, builder and owner.

As a result of careful standardized quantity production, the Truscon has effected in the Double-Hung window superior quality and design at a

TRUSCON STEEL COMPANY,

**TRUSCON**  
SOLID  
DOUBLE-HUNG  
COUNTER WEIGHT





## STANDARD SIZES

or any cross combination thereof

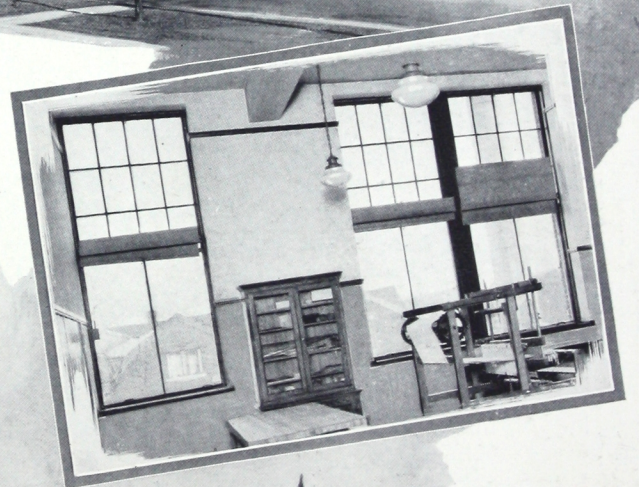
HORIZONTAL	VERTICAL
4' 0"	5' 10"
4' 6"	6' 6"
	6' 10"

Measurements of brick and masonry, also accepted sizes of bays in steel construction as well as ceiling heights and radiator heights have been considered in creating these sizes.

**Glazing**—Each sash is built to take an economical standard size pane. The windows are delivered unglazed, ready for glass  $\frac{1}{4}$ " or less in thickness as the case demands.

**Painting**—Before leaving the factory each window is completely painted with a shop coat of red oxide protective paint.

**Erection**—For the convenience of the masonry contractor in carrying out the erection of the windows a staff bead is provided. This enables the mason to build around the bead neatly and satisfactorily. Occasionally an opening larger than the standard staff bead size is required. In such cases the bead can be omitted and the masonry laid accordingly.



## Truscon Window Quality and Design

Steel is indispensable in building Truscon Double-Hung Window buildings of every type.

Schools, institutions and other buildings where beauty must combine with practical simplicity, this outstanding window offers unlimited advantages to the owner.

Standardization and highly ordered construction make the Truscon Steel Company Double-Hung Window a product of the highest quality at a reasonable first cost.

TRUSCON, YOUNGSTOWN, OHIO



**TRUSCON**  
STEEL  
DOUBLE-HUNG WINDOW  
PATENTED



# SPECIFICATIONS

## TRUSCON SOLID STEEL DOUBLE-HUNG WINDOWS

(COUNTER WEIGHTED)

### General

- 1 All window openings shown on drawings unless otherwise specified shall be equipped with solid steel Double-Hung windows as manufactured by the Truscon Steel Company of Youngstown, Ohio. No substitution shall be made without the approval of the architect.

### Material

- 2 All members of the sash and frames shall be constructed of Truscon specification copper alloy hot rolled billet steel. All exposed portions of the frame shall be made of No. 12 gauge material.

### Construction

- 3 All exposed joints to be welded and ground to smooth even surface.
- 4 Muntin bars shall consist of two strips of specially designed steel shapes screwed together and holding the glass firmly between them.
- 5 Meeting rails shall be designed to interlock and form a broad line of contact when closed.
- 6 Design shall also provide for double contact weathering at head sill and jambs when window is closed.
- 7 Surfaces of all sash and muntins shall be flush at joints and welded on outside.
- 8 Weights shall be hung in weight boxes through openings in frames provided for this purpose. Said openings to be on sash side of boxes and to be covered with steel plates.

### Hardware

- 9 Attached to the under side meeting rail at the center of the upper sash shall be one malleable, sherardized iron handle for lowering upper sash.

- 10 Two sherardized, malleable iron lifting handles shall be attached to lower rail of bottom sash.

- 11 One sherardized, malleable iron sweep lock complete shall be attached to meeting rails of both sashes.

(Solid bronze lock and lifting handles supplied on application.)

- 12 Chains shall be of galvanized steel. (Special makes of chains supplied on application.)

- 13 Sash weights shall be made of steel and adjusted in weight to balance with sash.

- 14 All screws shall be of sherardized steel.

- 15 All pulleys shall be made of malleable iron with heavy roller bearings.

### Painting

- 16 All windows shall be given a shop coat of protective paint before shipment. The remaining coats of paint will be furnished under separate contract by the painting contractor.

### Glazing

- 17 All glass shall be furnished and glazing performed by the glazing contractor. Glass shall be embedded in the steel members of the sash with special putty made especially for this purpose by The Truscon Laboratories.

### Erection

- 18 Windows shall be shipped to job fully assembled but to be set in place by others.

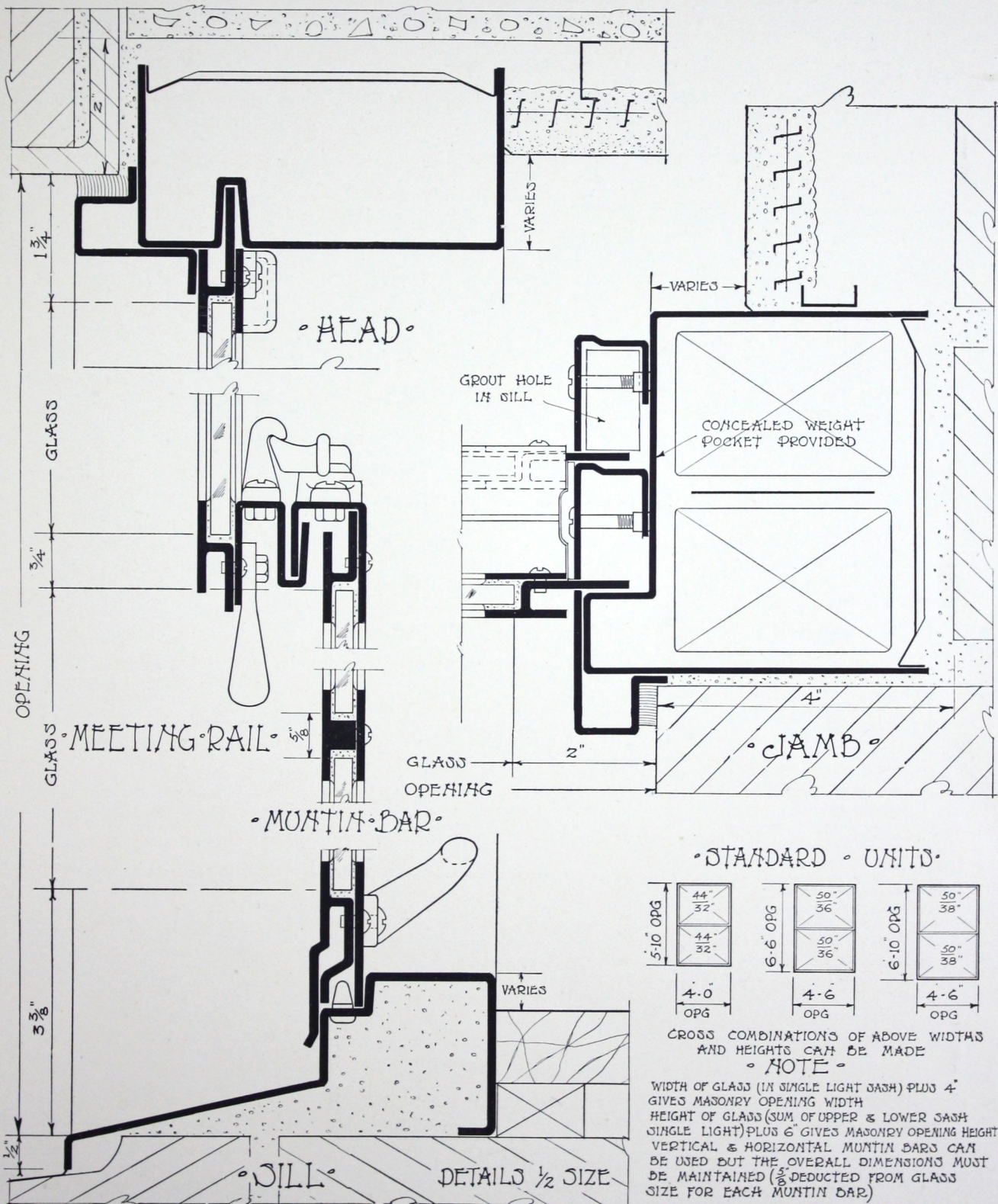
- 19 After frames have been set in masonry and properly built in, the joint between frame and masonry shall be carefully caulked and pointed up by others.

- 20 Application of hardware and weights, and final adjustment of windows to be made at job by Truscon Steel Company.



# SOLID SECTION—TRUSCON DOUBLE-HUNG WINDOW

FEBRUARY, 1925 (T-1)





## A Complete Line of Steel Windows and Mechanical Operators

**T**RUSCON manufactures windows for buildings of every description from residences, apartments and monumental office buildings to the varied types required throughout industrial plants, public buildings, schools, hospitals, and power houses, such as:

1. Projected Windows
2. Counterbalanced Windows
3. Double-Hung Windows
4. Donovan Awning Type Windows
5. Standard Casements
6. Basement Windows
7. Pivoted Sash
8. Continuous Sash
9. Pressed Steel and Standard Frames
10. Mechanical Operators for Steel Windows, manual or electrical controls.

### Truscon Pressed Steel Lintels

These lintels are made in standard sizes for use over openings of average size in every building. They develop equal strength with the old style structural steel angle and are much more economical.

### Other Truscon Products

**I**N addition to steel windows for every purpose, the Truscon Steel Company manufactures a complete line of building products. This includes Reinforcing Steel for all building purposes; Hy-Rib and Metal Lath; Standard

Steel Buildings and Standard Steel Trusses; Steel Joists; Steel Poles; Standard Lintels; Wire Mesh and Concrete Road Products; Foundry Flasks; Lift Truck Platforms; Boxes and other Pressed Steel Specialties.

### Truscon Service

**T**HE tremendous growth of the Truscon organization brought about necessarily the development of an extraordinary type of service. At each office listed below there is

a corps of men of wide building experience who will gladly tell you more about Truscon service and help you to benefit by it. Consult us before building, it costs you nothing.

#### Engineering and Sales Offices:

ALBANY, N. Y., 100 State Street  
ATLANTA, GA., Cooper Building  
BALTIMORE, MD., 406 Builders Exchange  
BIRMINGHAM, ALA., 513 N. 21st Street  
BOSTON, MASS., 147 Summer St., No. 9  
BUFFALO, N. Y., 726 Genesee Building  
CASPER, WYO., c/o Independent Supply Co.  
CHICAGO, ILL., 165 E. Erie Street  
CINCINNATI, O., 617 Provident Bank Building  
CLEVELAND, OHIO, 4614 Prospect Avenue  
COLUMBUS, O., 1000-04 Ferris Building  
DALLAS, TEX., 115 Field Street  
DAYTON, O., 110 S. Wayne Street  
DENVER, COL., 2941 Walnut Street  
DES MOINES, IA., 417 Hubbell Building  
DETROIT, MICH., 615 Wayne Street  
EL PASO, TEX., 1701 Olive Street  
ERIE, PA., 801 Palace Hdwe. Building

FT. WAYNE, IND., care Old Fort Supply Co.  
HARRISBURG, 3025 Derry Street  
HOUSTON, TEX., 312 Chronicle Building  
INDIANAPOLIS, IND., 241 E. Ohio Street  
JACKSONVILLE, FLA., 215 Professional Building  
KANSAS CITY, MO., 611 Bryant Building  
LOS ANGELES, CALIF., 1480 E. 4th Street  
LOUISVILLE, KY., 621 Marion E. Taylor Building  
MEMPHIS, TENN., Builders Exchange  
MIAMI, FLA., 211 Columbia Building  
MILWAUKEE, WIS., 1200 Straus Building  
MINNEAPOLIS, Metropolitan Bank Building  
NASHVILLE, TENN., 217 Vendome Building  
NEWARK, N. J., 38 Clinton Street  
NEW HAVEN, CONN., 41 Church Street  
NEW ORLEANS, 605 Carondelet Building  
NEW YORK, N. Y., 31 Union Square  
NORFOLK, VA., 511-9 Dickson Building

OAKLAND, CALIF., Rm. 21, 357 12th Street  
OKLAHOMA CITY, 319 Magnolia Building  
OMAHA, NEB., 401 Arthur Building  
PHILADELPHIA, PA., 1505 Race Street  
PITTSBURGH, PA., 2541 Oliver Building  
PORTLAND, ORE., Thompson and Kirby Streets  
PROVIDENCE, R. I., 146 Westminster Street  
ROSWELL, N. M., County Engineer's Office  
ST. LOUIS, MO., 1637 Syndicate Trust Building  
SALT LAKE CITY, 411 McIntyre Building  
SAN ANTONIO, TEX., 908 Travis Building  
SAN FRANCISCO, 709 Mission Street  
SEATTLE, WASH., 815 Seaboard Building  
SPRINGFIELD, MASS., 476 Main Street  
SYRACUSE, N. Y., 440 Gurney Building  
TAMPA, FLA., 19 Petteway Building  
TOLEDO, OHIO, 130 Summit Street  
TULSA, OKLA., 510 Mayo Building  
WASHINGTON, D. C., 414 Transportation Bldg.

FOREIGN TRADE DEPT., 90 West St., NEW YORK CITY  
RAILROAD DEPT., 165 East Erie Street, CHICAGO, ILLINOIS

TRUSSED CONCRETE STEEL COMPANY OF CANADA, Limited, WALKERVILLE, ONTARIO

Home Office and Factory:  
YOUNGSTOWN, OHIO, U. S. A.

Form No. 534—5000-1-25—R. S. C.

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SOLID STEEL  
DOUBLE-HUNG WINDOW  
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